

What is claimed is:

1. A method for the production of an easily polymerizable substance, comprising performing purification by the use of a column provided in at least part thereof with (a) a tray directly fixed with a bolt and a nut to a support ring fitted to the inner wall of the column and/or (b) a tray fixed to the support ring with a vertical clamp.  
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- 10 2. A method according to claim 1, wherein said tray is a dualflow tray.
- 15 3. A method according to claim 1 further comprising at least one liquid passing opening provided to the joint part between said support ring and the inner wall of said column.
- 20 4. A method according to claim 1 further comprising a liquid passing opening provided to the fixing part between said tray and said support ring and/or, where one tray is formed of a plurality of component plates, the fixing part between each of the component plates and the plate of tray.
- 25 5. A method according to claim 1, wherein said column is a distillation column with a plurality of trays.
6. A method according to claim 5, wherein said column is a distillation column with 3 to 100 trays.
- 30 7. A method according to claim 1, wherein said easily polymerizable substance is at least one member selected from the group consisting of an unsaturated carboxylic acid, an ester thereof, a vinyl-group containing compound, and a

diolefin compound.

8. A method according to claim 7, wherein said easily polymerizable substance is at least one member selected from  
5 the group consisting of an unsaturated carboxylic acid and an ester thereof.

9. A method for the production of an easily polymerizable substance, comprising performing purification by the use of  
10 a distillation column provided in the lower part thereof with a splash collision plate.

10. A method according to claim 9, wherein said distillation column has a dualflow tray.

15 11. A method according to claim 9, wherein said splash collision plate is at least one member selected from the group consisting of a dualflow tray, disc-and-doughnut plate and segmental baffle plate.

20 12. A method according to claim 11, wherein said column is a distillation column with 3 to 100 trays.

25 13. A method according to claim 9, wherein said easily polymerizable substance is at least one member selected from the group consisting of an unsaturated carboxylic acid, an ester thereof, a vinyl-group containing compound, and a diolefin compound.

30 14. A method according to claim 13, wherein said easily polymerizable substance is at least one member selected from the group consisting of an unsaturated carboxylic acid and

an ester thereof.

15. A purification apparatus comprising at least one of the following items (i) - (iii);

5 (i) a tray fixed to a support ring, fitted to the inner wall of a distillation column, by the use of a vertical clamp,

(ii) at least one liquid passing opening provided in the joint part between said support ring and the wall of said column, and

10 (iii) a liquid passing opening provided in the fixing part between said tray and said support ring.

16. An apparatus according to claim 15 further comprising 3 to 100 trays therein.

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17. An apparatus according to claim 15, the column is used for purifying an easily polymerizable substance.

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18. An apparatus according to claim 15 further comprising at least one liquid passing opening provided to the joint part between said support ring and the inner wall of said column.

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19. An apparatus according to claim 15 further comprising a liquid passing opening provided to the fixing part between said tray and said support ring and/or, where one tray is formed of a plurality of component plates, the fixing part between each of the component plates and the plate of tray.

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